

Svante Pääbo wins Nobel Prize in Medicine 2022 for human evolution based discoveries

03 October 2022 | News

Pääbo is known as one of the founders of paleogenetics, a discipline that uses the methods of genetics to study early humans and other ancient populations

The Nobel Prize in Physiology or Medicine 2022 has been awarded to Svante Pääbo, a Swedish geneticist specialising in the field of evolutionary genetics, for his discoveries concerning the genomes of extinct hominins and human evolution.

Through his pioneering research, Svante Pääbo accomplished something seemingly impossible: sequencing the genome of the Neanderthal, an extinct relative of present-day humans. He also made the sensational discovery of a previously unknown hominin, Denisova. Importantly, Pääbo also found that gene transfer had occurred from these now extinct hominins to *Homo sapiens* following the migration out of Africa around 70,000 years ago. This ancient flow of genes to present-day humans has physiological relevance today, for example affecting how our immune system reacts to infections.

Pääbo's seminal research gave rise to an entirely new scientific discipline; *paleogenomics*. By revealing genetic differences that distinguish all living humans from extinct hominins, his discoveries provide the basis for exploring what makes us uniquely human.

